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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,069	06/27/2003	K. Scott Weil	12903-B	7459
<div>7590      05/16/2007</div> <div>Douglas E. McKinley, Jr. McKinley Law Office P.O. Box 202 Richland, WA 99352</div>				
<div>EXAMINER</div> <div>ECHELMEYER, ALIX ELIZABETH</div>				
<div>ART UNIT      PAPER NUMBER</div> <div>1745</div>				
<div>MAIL DATE      DELIVERY MODE</div> <div>05/16/2007      PAPER</div>				

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/609,069

Applicant(s)

WEIL ET AL.

Examiner

Alix Elizabeth Echelmeyer

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 10, 2007 has been entered.
2. Claims 1 and 13 are amended. Claims 1-21 are rejected for the reasons given below.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3, 8-15, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Haltiner et al. (US 2003/0235746 A1).

Haltiner et al. teach a solid oxide fuel cell (SOFC) having sheet metal parts stamped from flat stock (abstract, [0009], [0010]). The parts, including a mounting frame for a positive electrode – electrolyte – negative electrode (PEN) and a separator plate, are used to form modules, or cells (abstract, [0009]). Those modules can then be stacked to form a fuel cell stack (Fig. 7, [0032]). Haltiner et al. also teach the use of current collectors which may be connected across a load (Fig. 3, [0003], [0025]). Glass seals are used between the modules. A glass layer or ceramic adhesive is applied prior to assembly, then the stack is “subjected to high pressure and temperature, whereby the glass seals are liquefied and fused” ([0032]).

Regarding claim 1, the SOFC modules of Haltiner et al. contain a stamped separator plate, a stamped frame, a PEN attached to the frame, and the frame attached to the separator plate. Regarding claims 3 and 17, the SOFC of Haltiner et al. contains current collectors that are in communication with the separator plate. Applicants’ claim 8 is for a method of making a SOFC stack, and claim 13 is a SOFC stack. Haltiner et al. teach the combination of several modules to form a stack as well as the sealing of the modules.

Applicants’ claims 9-12, 14, and 15 are drawn to the method of sealing a SOFC stack and the seal on the SOFC stack. Haltiner et al. teach insulating seals made of glass or a ceramic. The seal is formed by exposure to high temperature and pressure. Further, Haltiner et al. teach the connection of separator plates and frames by brazing.

***Claim Rejections - 35 USC § 103***

Art Unit: 1745

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haltiner et al. in view of Carolan et al. (US Patent Number 5,750,279). The teachings of Haltiner et al. as discussed above are incorporated herein.

Haltiner et al. teach a fuel cell stack and the method of making it wherein the stack is made up of modules. The modules are formed by frames containing a PEN, which are connected to separator plates. Haltiner et al. fail to teach the use of 400 series stainless steel as the material for the frames and separators.

Carolan et al. teach that stainless steel (400 series) is suitable for use in SOFC's because it is resistant to corrosion and oxidation.

It would be favorable to use 400 series stainless steel as taught by Carolan et al. in the SOFC of Haltiner et al. because 400 series stainless steel can be stamped as required in Haltiner et al., and it is also resistant to corrosion and oxidation.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the 400 series stainless steel of Carolan et al. in the SOFC of Haltiner et al. because 400 series stainless steel is resistant to corrosion and oxidation.

7. Claims 4-7 and 18-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Haltiner et al. and Carolan et al. in view of James et al. (US Patent Number 5,766,789 A). The teachings of Carolan et al. discussed above are incorporated herein.

Carolan et al. teach the use of a 400 series stainless steel electrically conducting interconnect. Carolan et al. fail to teach the use of a flexible material such as a screen for those interconnects.

James et al. teach the use of a screen as a flexible material for an interconnect (column 3 lines 24-26). James et al further teach a compound containing mostly (76%) nickel for the formation of the screen used as the current collector in the anode.

By forming the current collector of Carolan et al. with the screen of James et al., a current collector made from a flexible, electrically conductive material is made.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to make the current collector of Carolan et al. with the screen of James et al. in order to make a flexible, electrically conductive current collector.

### ***Response to Arguments***

8. Applicants' arguments filed April 10, 2007 have been fully considered but they are not persuasive. Applicants argue that the affidavits filed July 13, 2006 and April 10, 2007 overcome the 102(e) rejection by showing that the invention as claimed was conceived prior to June 24, 2002, the filing date of Haltiner et al.

The examiner has reviewed the CFR 1.131 declaration submitted by Applicants and believes that Applicants failed to demonstrate due diligence in reducing the

Art Unit: 1745

invention to practice. The time lapse of nearly two years, from November 8, 2000 to June 24, 2002, is not explained in the record. This time period has not been accounted for by Applicants.

Section 2138.06 of the MPEP discusses requirements to show due diligence:

**THE ENTIRE PERIOD DURING WHICH DILIGENCE IS REQUIRED  
MUST BE ACCOUNTED FOR BY EITHER AFFIRMATIVE ACTS OR  
ACCEPTABLE EXCUSES**

An applicant must account for the entire period during which diligence is required. *Gould v. Schawlow*, 363 F.2d 908, 919, 150 USPQ 634, 643 (CCPA 1966) (Merely stating that there were no weeks or months that the invention was not worked on is not enough.); *In re Harry*, 333 F.2d 920, 923, 142 USPQ 164, 166 (CCPA 1964) (statement that the subject matter "was diligently reduced to practice" is not a showing but a mere pleading). A 2-day period lacking activity has been held to be fatal. *In re Mulder*, 716 F.2d 1542, 1545, 219 USPQ 189, 193 (Fed. Cir. 1983) (37 CFR 1.131 issue); *Fitzgerald v. Arbib*, 268 F.2d 763, 766, 122 USPQ 530, 532 (CCPA 1959) (Less than 1 month of inactivity during critical period. Efforts to exploit an invention commercially do not constitute diligence in reducing it to practice. An actual reduction to practice in the case of a design for a three-dimensional article requires that it should be embodied in some structure other than a mere drawing.); *Kendall v. Searles*, 173 F.2d 986, 993, 81 USPQ 363, 369 (CCPA 1949) (Diligence requires that applicants must be specific as to dates and facts.).

The period during which diligence is required must be accounted for by either affirmative acts or acceptable excuses. *Rebstock v. Flouret*, 191 USPQ 342, 345 (Bd. Pat. Inter. 1975); *Rieser v. Williams*, 225 F.2d 419, 423, 118 USPQ 96, 100 (CCPA 1958) (Being last to reduce to practice, party cannot prevail unless he has shown that he was first to conceive and that he exercised reasonable diligence during the critical period from just prior to opponent's entry into the field); *Griffith v. Kanamaru*, 816 F.2d 624, 2 USPQ2d 1361 (Fed. Cir. 1987) (Court generally reviewed cases on excuses for inactivity including vacation extended by ill health and daily job demands, and held lack of university funding and personnel are not acceptable excuses.); *Litchfield v. Eigen*, 535 F.2d 72, 190 USPQ 113 (CCPA 1976) (budgetary limits and availability of animals for testing not sufficiently described); *Morway v. Bondi*, 203 F.2d 741, 749, 97 USPQ 318, 323 (CCPA 1953) (voluntarily laying aside inventive concept in pursuit of other projects is

Art Unit: 1745

generally not an acceptable excuse although there may be circumstances creating exceptions); *Anderson v. Crowther*, 152 USPQ 504, 512 (Bd. Pat. Inter. 1965) (preparation of routine periodic reports covering all accomplishments of the laboratory insufficient to show diligence); *Wu v. Jucker*, 167 USPQ 467, 472-73 (Bd. Pat. Inter. 1968) (applicant improperly allowed test data sheets to accumulate to a sufficient amount to justify interfering with equipment then in use on another project); *Tucker v. Natta*, 171 USPQ 494,498 (Bd. Pat. Inter. 1971) ("[a]ctivity directed toward the reduction to practice of a genus does not establish, prima facie, diligence toward the reduction to practice of a species embraced by said genus"); *Justus v. Appenzeller*, 177 USPQ 332, 340-1 (Bd. Pat. Inter. 1971) (Although it is possible that patentee could have reduced the invention to practice in a shorter time by relying on stock items rather than by designing a particular piece of hardware, patentee exercised reasonable diligence to secure the required hardware to actually reduce the invention to practice. "[I]n deciding the question of diligence it is immaterial that the inventor may not have taken the expeditious course....").

Further, due diligence must be directly related to the reduction to practice. The affidavit of record does not appear to the examiner to reflect enough details of the instant application to show how the invention was reduced to practice. For example, the materials used in several parts of the instant application, i.e. the anode and cathode, are not mentioned in the affidavit.

Section 2138.06 of the MPEP discusses requirements to show due diligence:

**WORK RELIED UPON TO SHOW REASONABLE DILIGENCE MUST BE  
DIRECTLY RELATED TO THE REDUCTION TO PRACTICE**

The work relied upon to show reasonable diligence must be directly related to the reduction to practice of the invention in issue. *Naber v. Cricchi*, 567 F.2d 382, 384, 196 USPQ 294, 296 (CCPA 1977), cert. denied, 439 U.S. 826 (1978). >See also *Scott v. Koyama*, 281 F.3d 1243, 1248-49, 61 USPQ2d 1856, 1859 (Fed. Cir. 2002) (Activities directed at building a plant to practice the claimed process of producing tetrafluoroethane on a large scale constituted efforts toward actual reduction to practice, and thus were evidence of diligence. The court distinguished cases where diligence was not found because inventors either discontinued development or failed to complete the invention



Art Unit: 1745

while pursuing financing or other commercial activity.); In re Jolley, 308 F.3d 1317, 1326-27, 64 USPQ2d 1901, 1908-09 (Fed. Cir. 2002) (diligence found based on research and procurement activities related to the subject matter of the interference count).< "[U]nder some circumstances an inventor should also be able to rely on work on closely related inventions as support for diligence toward the reduction to practice on an invention in issue." Ginos v. Nedelec, 220 USPQ 831, 836 (Bd. Pat. Inter. 1983) (work on other closely related compounds that were considered to be part of the same invention and which were included as part of a grandparent application). "The work relied upon must be directed to attaining a reduction to practice of the subject matter of the counts. It is not sufficient that the activity relied on concerns related subject matter." Gunn v. Bosch, 181 USPQ 758, 761 (Bd. Pat. Inter. 1973) (An actual reduction to practice of the invention at issue which occurred when the inventor was working on a different invention "was fortuitous, and not the result of a continuous intent or effort to reduce to practice the invention here in issue. Such fortuitousness is inconsistent with the exercise of diligence toward reduction to practice of that invention." 181 USPQ at 761.

Furthermore, evidence drawn towards work on improvement of samples or specimens generally already in use at the time of conception that are but one element of the oscillator circuit of the count does not show diligence towards the construction and testing of the overall combination.); Broos v. Barton, 142 F.2d 690, 691, 61 USPQ 447, 448 (CCPA 1944) (preparation of application in U.S. for foreign filing constitutes diligence); De Solms v. Schoenwald, 15 USPQ2d 1507 (Bd. Pat. App. & Inter. 1990) (principles of diligence must be given to inventor's circumstances including skill and time; requirement of corroboration applies only to testimony of inventor); Huelster v. Reiter, 168 F.2d 542, 78 USPQ 82 (CCPA 1948) (if inventor was not able to make an actual reduction to practice of the invention, he must also show why he was not able to constructively reduce the invention to practice by the filing of an application).

Additionally, concerning the affidavit by Scott Weil filed April 10, 2007, paragraphs 4, 11, and 12 contain statements concerning evidence of due diligence. These assertions are not considered to be factual since originals or photocopies of the presentations are not provided, as required by the MPEP:

Section 715.07 of the MPEP discusses facts and documentary evidence when swearing behind a date:

#### GENERAL REQUIREMENTS

The essential thing to be shown under 37 CFR 1.131 is priority of invention and this may be done by any satisfactory evidence of the fact. FACTS, not conclusions, must be alleged. Evidence in the form of exhibits may accompany the affidavit or declaration. Each exhibit relied upon should be specifically referred to in the affidavit or declaration, in terms of what it is relied upon to show. For example, the allegations of fact might be supported by submitting as evidence one or more of the following:

- (A) attached sketches;
- (B) attached blueprints;
- (C) attached photographs;
- (D) attached reproductions of notebook entries;
- (E) an accompanying model;
- (F) attached supporting statements by witnesses, where verbal disclosures are the evidence relied upon. *Ex parte Ovshinsky*, 10 USPQ2d 1075 (Bd. Pat. App. & Inter. 1989);
- (G) testimony given in an interference. Where interference testimony is used, the applicant must point out which parts of the testimony are being relied on; examiners cannot be expected to search the entire interference record for the evidence. *Ex parte Homan*, 1905 C.D. 288 (Comm'r Pat. 1905);
- (H) Disclosure documents (MPEP § 1706) may be used as documentary evidence of conception.

Exhibits and models must comply with the requirements of 37 CFR 1.91 to be entered into an application file. See also MPEP § 715.07(d).

A general allegation that the invention was completed prior to the date of the reference is not sufficient. *Ex parte Saunders*, 1883 C.D. 23, 23 O.G. 1224 (Comm'r Pat. 1883). Similarly, a declaration by the inventor to the effect that his or her invention was conceived or reduced to practice prior to the reference date, without a statement of facts demonstrating the correctness of this conclusion, is insufficient to satisfy 37 CFR 1.131. 37 CFR 1.131(b) requires that original exhibits of drawings or records, or photocopies thereof, accompany and form part of the affidavit or declaration or their absence satisfactorily explained. In *Ex parte Donovan*, 1890 C.D. 109, 52 O.G. 309 (Comm'r Pat. 1890) the court stated

If the applicant made sketches he should so state, and produce and describe them; if the sketches were made and lost, and their contents remembered, they should be reproduced and furnished in place of the originals. The same course should be pursued if the disclosure was by means of models. If neither sketches nor models are

relied upon, but it is claimed that verbal disclosures, sufficiently clear to indicate definite conception of the invention, were made the witness should state as nearly as possible the language used in imparting knowledge of the invention to others.

However, when reviewing a 37 CFR 1.131 affidavit or declaration, the examiner must consider all of the evidence presented in its entirety, including the affidavits or declarations and all accompanying exhibits, records and "notes." An accompanying exhibit need not support all claimed limitations, provided that any missing limitation is supported by the declaration itself. *Ex parte Ovshinsky*, 10 USPQ2d 1075 (Bd. Pat App. & Inter. 1989).

The affidavit or declaration and exhibits must clearly explain which facts or data applicant is relying on to show completion of his or her invention prior to the particular date. Vague and general statements in broad terms about what the exhibits describe along with a general assertion that the exhibits describe a reduction to practice "amounts essentially to mere pleading, unsupported by proof or a showing of facts" and, thus, does not satisfy the requirements of 37 CFR 1.131(b). *In re Borkowski*, 505 F.2d 713, 184 USPQ 29 (CCPA 1974). Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also *In re Harry*, 333 F.2d 920, 142 USPQ 164 (CCPA 1964) (Affidavit "asserts that facts exist but does not tell what they are or when they occurred.").

Concerning the power point presentation dated September 23, 2001, Applicants assert that this is proof of a joint research agreement between the assignee of the instant invention and the assignee of the Haltiner et al. reference. According to the MPEP, this document does not serve as proof of such an agreement.

Section 706.02 of the MPEP, citing 35 U.S.C. 103 (c), states:

**Conditions for patentability; non-obvious subject matter:**

(c)

(2) For purposes of this subsection, subject matter developed by another person and a claimed invention shall be deemed to have been owned by the same person or subject to an obligation of assignment to the same person if —

Art Unit: 1745

(A) the claimed invention was made by or on behalf of parties to a joint research agreement that was in effect on or before the date the claimed invention was made;

(B) the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and

(C) the application for patent for the claimed invention discloses or is amended to disclose the names of the parties to the joint research agreement.

(3) For purposes of paragraph (2), the term "joint research agreement" means a written contract, grant, or cooperative agreement entered into by two or more persons or entities for the performance of experimental, developmental, or research work in the field of the claimed invention.

The instant power point presentation does not meet the above requirements. Specifically, it does not qualify as a "joint research agreement" since it is not a written contract, grant, or cooperative agreement.

Essentially, Applicant has provided two pieces of evidence to swear behind the filing date of the Haltiner et al. reference: the affidavit of Meinhardt showing conception and the power point presentation showing an alleged joint research agreement. Due diligence has not been shown to swear behind the date.

The examiner has considered the pieces of evidence described in the Weil affidavit but not provided as required by MPEP 715.07. These alleged pieces of evidence fill in some of the time in the period between conception and the filing date of Haltiner et al., but still leave troubling long gaps. For example, in paragraph 12 of the Weil affidavit, a time lapse of eight months exists between two pieces of evidence:

Art Unit: 1745

"Scott's fuel cells assy.ppt; author Weil" of 11/16/00 and "Pics of stack #3; author Weil" of 7/20/01. Due diligence has not been shown in the time period between these two pieces of evidence.

Further, it is unclear from the list in paragraph 12 of the Weil affidavit what any of those pieces of evidence show. As non-limiting examples, it is unclear what "NETL 10-27-00" or "TWP 11-10-00.doc" even are.

In the second paragraph of page 8 of the Remarks, it is stated that in the time period after the filing date of the Haltiner et al. reference, the inventors were working to reduce the invention to practice. Yet, the last sentence of the first full paragraph of page 10 of the Remarks states that the invention was reduced to practice prior to the filing date of the Haltiner et al. references.

First, these two statements are contradictory. It is impossible to have reduced the invention to practice both before and after the filing date of the Haltiner et al. reference.

Second, if it is true that the invention was reduced to practice prior to the filing date of the Haltiner et al. reference, there is no proof.

In summary, the evidence present in the Request for Continuation filed April 10, 2007 is insufficient to overcome the 102(e) rejection over Haltiner et al. because Applicants have not shown to the satisfaction of the examiner, that the invention was conceived before the filing of Haltiner et al. and diligently developed after that

Art Unit: 1745

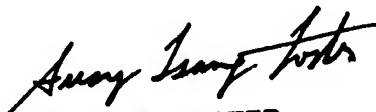
conception. Additionally, the power point presentation alleging a joint research agreement is not considered to be proof of such an agreement.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alix Elizabeth Echelmeyer whose telephone number is 571-272-1101. The examiner can normally be reached on Mon-Fri 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's trainer, Susy N. Tsang-Foster can be reached on 571-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
SUSYTSANG-FOSTER  
PRIMARY EXAMINER

Alix Elizabeth Echelmeyer  
Examiner  
Art Unit 1745